STATE OF NEVADA PERSPECTIVE ON THE PROPOSED CALIENTE RAIL CORRIDOR

Bob Halstead
State of Nevada Agency for Nuclear Projects
Fred Dilger, PhD
Black Mountain Research
Presentation to
Western Interstate Energy Board
HLW Committee
Las Vegas, Nevada
October 13, 2005

Additional documentation available at http://www.state.nv.us/nucwaste/trans.htm
Caliente Corridor Concerns

- Shipments to Caliente Corridor Through Las Vegas
- Hazards along Union Pacific Mainline to Caliente Corridor
- Hazards along Caliente Corridor
- Impacts on Current Land Users
- Impacts on “City” Installation
- Impacts on Native Americans
6%-89% of Rail Shipments to Caliente Corridor Go through Las Vegas; 80,000 People Reside, Recreate, or Work within One-half Mile
Many Las Vegas locations close to UP - evacuations and routine exposure concerns

Potential exposure per year
One cask, 48 hour stop
457 casks, one hour stop each

MEI#1 12-114 mrem/yr
MEI#2 5.2-49.4 mrem/yr
MEI#3 0.3-3.4 mrem/yr
Union Pacific Mainline to Caliente
Flooding Between Eccles and Minto, 1907
Union Pacific Mainline to Caliente
Flooding South of Caliente, January 2005
UP Route Characteristics & Concerns
(Uvada, MP 501.1; Caliente, MP 459.8; Moapa, MP 383.5)

• “The 118-mile study corridor traverses very rugged terrain. The route is confined within the canyon walls of Clover Creek and Meadow Valley Wash. The route exhibits a high degree of curvature as it descends 4,300 ft. from the high plateau at the Utah border to the desert floor beyond the southern end of the study area [Moapa].” (UNR, 1991, p. 25)

• Track equipped with high quality materials and maintained in good to excellent condition

• Steep grades and tight curves require speed restrictions, especially for westbound trains on the downgrade

• 15 tunnels, 107 bridges, 66 culverts

• Numerous rockfall areas and flood areas

• Updated accident study needed
UP Route Characteristics
Yucca Mountain Transportation Access Routes – DOE 1986 EA
Railroad Roots: City of Caliente and Lincoln County Lobbied DOE for Rail Spur
DOE Rail Route Studies, 1990-1991
Caliente Corridor Topography Poses Severe Construction and Operation Impacts
Difficult Terrain
Timber Mountain Pass
Difficult Terrain
Water Gap
Railroad Impacts on Land Use

Track bed equivalent to a crushed stone wall, 300+ miles long, 10 - 30 feet thick, varying in height from 1 - 8 feet, with a railroad on top of the wall
Land Use Conflict – Cattle Ranching
Reveille Valley
Land Use Conflict – Goldfield Mining District
Land Use Conflict - Major Outdoor Art Installation: M. Heizer, “City”

An Artist at the End of the World

...ment to finish what may be the biggest sculpture on earth.

By Michael Kimmelman
Land Use Conflict - “City”
Caliente Corridor Potential Impacts on Native American Communities

- Las Vegas Reservation - Truck Shipments to Yucca Mountain
- Moapa Reservation – Rail Shipments to Caliente, Truck Shipments to Yucca Mountain
- Timbisha Shoshone Tribe – Construction and Operation of Caliente rail line, Truck Shipments to Yucca Mountain
- Western Shoshone National Council - Construction and Operation of Caliente rail line (Ruby Valley Treaty land claims)